

August 13, 2012

**Response from IDB on Approval by mail: CTF-IDB "Ecocasa" Program  
(Mexico Energy Efficiency Program Part II) (IDB)**

Dear Zhihong

Please find enclosed our responses to the questions by Germany and the UK on our Ecocasa proposal.

Regards

Claudio

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**Responses to comments from CTF Trust-Fund Committee members to  
the  
CTF-IDB ECOCASA Program**

*Prepared by the Inter-American Development Bank (IDB)*

August 13<sup>th</sup>, 2012

We would like to thank the governments of the United Kingdom, Germany and the US for their written comments and questions<sup>1</sup>. Please find below our responses to their questions.

Questions from the United Kingdom

***Since the ECOCASA scheme is for new housing developments, it is not clear why developing and enforcing building standards would not achieve the same impact (or a much larger impact if applied to all new housing developments). If the problem is the capacity of municipal governments to enforce standards, would it not be more effective to use funding to strengthen their capacity?***

It is true that the enforcement of the existing standards (and in particular the NOM-020 standard) is one part of the solution, and some of the technical cooperation activities of the program will be aimed at this. However, building the capacity of municipal governments would be insufficient to ensure an adequate enforcement, given the usual discontinuity between municipal administrations (which change every 3 years), and their lack of incentives.

Furthermore, even if enforcement was not a problem, the scope of standards is limited. The current NOM-020 is relatively mild, and more ambitious standards would be socially unacceptable.

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<sup>1</sup> [http://bit.ly/CTF\\_Comments\\_Germany](http://bit.ly/CTF_Comments_Germany), [http://bit.ly/CTF\\_Comments\\_UK](http://bit.ly/CTF_Comments_UK), [http://bit.ly/CTF\\_Comments\\_US](http://bit.ly/CTF_Comments_US)

Due to these reasons, economic incentives have a key role to play in the transition towards lower carbon housing in Mexico, and the Federal Government has the right institutional framework for their implementation.

Standards and incentives need to move hand in hand. As incentives raise awareness and build capacity, more ambitious standards will be possible, and necessary.

***It was not very clear how this project would lead to larger-scale transformation. At the moment it appears to only impact about 1% of the expected housing demand. It is argued that the programme will lead to changes in policies, regulations and programmes at federal and local level. Could you please explain how it will lead to these changes, i.e. what is the theory of change?***

The Program is an integral part of the General Strategy of the GoM to mitigate climate change and address sustainability in the housing sector, and this will very likely continue being a priority for the new government, as shown by the fact that the Climate Change Law was endorsed by all political parties. We are assuming that the program will lead to changes in the policies, regulations and programs at the Federal and local levels (in particular in CONAVI and INFONAVIT), and hence will have a relevant transformational impact. In particular, we expect that the current technology-based incentive programs will shift towards more efficient performance-based criteria (see also the theory of change diagram below).

**Theory of change diagram**

Inputs	Products	Outputs	Impact
Program execution and TC activities.	Quantitative and qualitative results from the Monitoring and Evaluation Plan. Actual costs and benefits of the program Lessons learnt.	Scale up of current federal programs (CONAVI, INFONAVIT). Increased knowledge and expertise on this type of projects for the various institutions involved.	Broadening of the scope and ambition of national programs. Increased credibility of the markets on the benefits and viability of low-carbon housing. Improved effectiveness in the accomplishment of the climate change agenda in Mexico.

***We are keen to understand how the project will impact poor people and how this will be measured and monitored. Will the project create employment and entrepreneurial opportunities? How will these be measured and disaggregated?***

The Program will significantly impact poor people, by reducing their energy expenditure, and by improving their comfort (as proposed in the program document, low-comfort housing is one of the facets of poverty). Moreover, in a context of raising temperatures, the contribution of the Program in terms of *adaptation to climate change* should be stressed. The program will measure the impacts in terms of expenditure and comfort, but adaptation impacts are harder to measure, especially in the relatively short timeframe of program execution.

With regards to employment and entrepreneurial impacts, it is true that the construction of energy-efficient houses will likely lead to more jobs as compared to the traditional building techniques (in particular in the manufacturing of components such as thermal insulation, or better windows). However, since we consider that these impacts are relatively minor, and since we are already channelling a substantial amount of resources for the monitoring and evaluation of other climate and development indicators, we have opted not to measure employment or entrepreneurial impacts.

Questions from Germany

**Questions regarding overall project approach and implementation strategy**

***We are not sure why the programme limits itself to the development and construction of new housing while the application of standards and incentives for improving EE of existing housing is being left out.***

We agree that the transition towards lower carbon housing has to be addressed from both sides: new and existing housing stock. As seen in INFONAVIT's Green Mortgage program and in the recent Sustainable Housing NAMA of CONAVI, new housing is the first step to be implemented. INFONAVIT is now beginning to include existing housing in its *Hipoteca Verde* Programme, and the NAMA states that a second phase of deployment would focus on existing housing. Similarly, it is expected that the lessons learnt from the Ecocasa Program would be eventually applicable to existing housing.

Furthermore, as explained in the proposal, the nature of the housing market has led us to opt for a supply-side approach (namely, bridge loans), whereas for the case of existing housing, a mortgage instrument would probably be more adequate.

***It is not entirely clear how the project complements existing initiatives and is based on lessons learnt opposed to merely replicating what has been done before.***

The Ecocasa Program is innovative, at both the national and international levels. It is the first one in Mexico to address the problem from the supply side and not from the demand side. Moreover, it is based on a performance-based, whole-house approach, rather than on the inclusion of specific eco-technology packages.

The Inter-Institutional Sustainable Housing Working Group will ensure the coordination between the existing initiatives and enhance possible synergies in topics such as ex-ante simulation, monitoring and evaluation, training and capacity building, and sustainable pilot projects. The Project team (including SHF, IDB and KfW) is part of this Working Group.

***Given the severity and rapid pace of urban sprawl in the key target areas of the project, we would appreciate more clarity as to how the project supports the GoMs current urbanization policies. This applies particularly to the risk that the improved credit provision for low-income housing resulting from the project (if not combined with safeguards and incentives to counterbalance this likely outcome) could contribute to further aggravate the problem of driving poorer households even further outside of urban boundaries. This effect has been observed with comparable housing/mortgage projects in the past; hence it would be reassuring to know that this risk is being addressed.***

We appreciate that you raise this relevant problem. We consider that it will be tackled in four different ways:

First, the safeguards applied by SHF require that housing projects are built in municipalities that comply with planning and other urban development preconditions. SHF uses as an indicator for this purpose the Municipal Competitiveness Index for Housing (INCOMUV), determined by an independent organisation - the National Competitiveness Institute (IMCO). IMCO rated in 2011 402 municipalities with 72 indicators, grouped in three pillars: (i) legislation and housing characteristics, including sustainability, access to basic services and existence of legislation; (ii) house in the urban context, including urban development policy, equipment, financial capacity of the municipality, transportation services, and (iii) context of the city in the country, including potential housing demand and competitive dynamics. SHF will prioritize the use of Program's resources in municipalities that are in the *high* and *adequate* groups. For those municipalities that score lower in the Index, SHF will provide resources for training in order to reduce the gap.

Second, as from 2012, CONAVI has included location as a criterion for assigning its *Esta es tu casa* subsidy (30% of the final rating weight). Since all of the Ecocasa houses will be eligible to receive this subsidy, housing developers are already considering this incentive in their location decisions.

Third, SHF is actively participating in the Integral Sustainable Urban Developments (DUIS) Program (it is the lead agency for the Promotion and Evaluation Group, or GPEDUIS). The DUIS framework is primarily focused on an urban development approach that minimizes transportation needs. Some of the housing developments to be built with the support of Ecocasa will be located in DUIS developments.

Finally, looking forward, the program includes the delivery of a model for determining the reduction of transport-related GHG emissions as a function of the location of the house. As a result, transport-related GHG emission reductions (as compared to a baseline scenario) would be factored in, and Program incentives would be granted accordingly.

### **Questions and observations regarding assumptions and calculations**

***For the following reasons, we would appreciate greater clarity concerning the assumptions made with regards to expected loan/mortgage default rates: (i) Loan reimbursements seem to be a major source of funding for the “second wave” of construction, adding another 13,800 houses to the 27,600 houses built during the first wave. (ii) Created in 2002 and with less than EUR 1 bio of mortgage loans (with assumed avg. loan of EUR 25k equiv. to approx. 40,000 loans) in its performing loan portfolio, SHF is still a relatively new and small player on the Mexican mortgage market, hence it seems debatable whether or not the organisation has the capacity to manage a program of comparable size and complexity while achieving the assumed competitive collection rates and transaction cost of past projects (which were all managed by much bigger and more established players).***

The Bank carried out an institutional capacity analysis (*Sistema de Evaluación de Capacidad Institucional*, SECI) on SHF in order to assess potential risks due to the size and complexity of the program. While the results of the analysis were satisfactory and the SHF has shown robust experience and capacity in the execution of previous programs financed by the Bank, the technical cooperation package that complements the program proposal includes the financing of a technical team to support SHF. This support will include activities related to the management of the program, coordination with IDB, technical review of products of the technical cooperation activities and supervision of monitoring efforts. It is expected that the organization's previously acquired capacity, along with the support provided by the TC activities, will help SHF to adequately manage the program, being able to foresee and address any critical aspects that may compromise collection rates and transaction costs.

***Project “products” and “results” in the results matrix are only provided for the initiative as a whole. Hence, in particular with regards to GHG emission reductions, it is not clear which part or***

***percentage of project impacts can be assigned/correlated to CTF funding provided.***

The reductions in emissions are not accounted for independently as the project was not conceived as an isolated financing from the CTF but as a comprehensive operation co-financed by three collaborating funds. Hence, the total savings of the operation are considered and measured as a whole, considering CTF resources are leveraging capital from additional sources which otherwise may not have participated from the program due to its specific scope and objective. As one of the purposes of the CTF is to leverage resources from other institutions to achieve a bigger impact, the accounting on the CTF resources alone does not completely fit the spirit of the Fund. Nevertheless, if we exclude the IDB-financed mortgage component of the program, as well as the KfW resources, the figures would be as follows: 510,000 Tons of CO<sub>2</sub>e emission reductions and USD 101 per Ton of CO<sub>2</sub>e abated.

***The numbers for number of houses built and GHG emissions abated given on page 12 and the results matrix do not seem to match.***

Page 12 of the document reads: "Using conservative estimates, the program is expected to produce around 27,600 houses built and another 1,700 financed, in the first seven years. Based on the time span considered, the CTF/KfW funds are expected to deliver the construction of, at least, one additional wave of houses amounting to half the first wave (13,800 houses), totalizing 43,100 houses built and purchased." The results matrix presents figures only for the first seven years after the beginning of the implementation: 27,600 ECOCASAS funded by CTF/KfW resources and 1,700 green mortgages funded by IDB resources. The so called additional "wave of houses" happens after year 7 and only includes the ECOCASAS. The total of 43,100 houses built and purchased results from adding the second wave of ECOCASAS to the total number of houses that appears in the results matrix (27,600+1,700+13,800).

***While the project document (for the sake of calculating savings in energy subsidies) assumes a continued 0.14 USD/kWh subsidization of electricity increasing by 6% annually (amounting to a subsidy of 0.20 USD in year 7), the calculations do not seem to consider the negative effect of rising subsidies on the demand for improvements in energy efficiency and clean energy appliances at the household level. Moreover, while electricity subsidies have been partly included into NPV calculations, the impact of natural gas subsidies does not seem to be reflected at all. Since the direct and indirect subsidization of energy (in particular with regard to electricity and natural gas) continues to be a major barrier for energy efficiency improvements and the dissemination of renewable energy appliances in the housing sector, we suggest to more comprehensively reflect the impact of***

***current and future energy subsidies on project results in the form of different scenarios (e.g. phase out, constant, rising subsidies).***

A reduction in subsidies would certainly increase the energy savings and would obviously make energy efficiency investments more viable from the perspective of the house buyer. However, it would not change the results of the economic analysis, because supply is limited to the funding that will be allocated to this end, and demand has been estimated conservatively. Therefore, unless significant deviations from the trends occur, it is not expected that the estimated rise in subsidies will have a considerable impact on the demand for energy efficient products or services.

For the calculation of electricity and gas subsidies, we used the same assumptions as the NAMA, for the sake of consistency. In Mexico LPG is more widely used than natural gas.

Subsidy setting is of course exogenous to the project. However, as both the government and the developers are well aware of the connections between subsidies and the financial viability of low-carbon housing, they have requested that a study is carried out to elicit these connections. Such study will be part of the Program's technical cooperation activities.

Comments from the United States of America

***The United States has no objections to the IDB proposal for the Ecocasa program. However, as the project progresses, we would like to see an update on the expected uptake of the building standards promoted by the project and the potential for demonstration potential at scale beyond what is being directly funded by the CTF, IDB and KfW.***

We will keep this request in mind.